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| Name: | Date: |
| Course/Subject: Keystone Algebra I | Team: |
| Topic: Solving Linear Equations | School District: Blue Mountain |

Key Learning: Solving and graphing linear equations.

Unit Essential Question: How are linear equations and graphs used to solve real-life applications?

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| Concept: Solve single and multi-step equations | Concept: Applying properties | Concept: Applying to problem solving |
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| Lesson Essential Questions:   * How do you solve single step equations? * How do you solve multi-step equations? * How do we solve absolute value equations? * What is the difference between solving an absolute value equation and a linear equation? (ET) | Lesson Essential Questions:   * How does each property apply to solving equations? * Explain the uses of each property and give an example. (ET) | Lesson Essential Questions:   * How do we use equations to problem solve?   + Distance   + Number /Coin   + Age   + Geometry * Correct the mistake in a problem solving sample. (ET) |
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| Vocabulary:   * Solution * Unique * Infinite * No solution * Combining like terms | Vocabulary:   * Distributive * Inverse * Identity * Commutative * Associative | Vocabulary:   * Defining variables |
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| Additional Information/Resources: Calculators  Construct a written response to extend understanding | | |

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| Concept: Graphing Linear Equations | Concept: Graphing System of Linear Equations | Concept: Solve Systems of Linear Equations | Concept: Problem Solve with Systems | Concept: |
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| Lesson Essential Questions:   * How do we graph linear equations? * Why is slope considered a rate of change? (ET) | Lesson Essential Questions:   * How do we graph systems of linear equations? * Why is it useful to know if two lines are parallel? (ET) | Lesson Essential Questions:   * How do we solve systems of linear equations using two variables by graphing? * How do we solve systems of linear equations using two variables by using Algebra? * Explain the limitations of solving a system of linear equations by graphing. (ET) | Lesson Essential Questions:   * How do we use systems to problem solve?   + Distance   + Geometry   + Combinations * Explain the uses of systems in real life situations. (ET) | Lesson Essential Questions: |
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| Vocabulary:   * Points * Slope * Intercepts * Coordinates | Vocabulary:   * Parallel lines * Perpendicular lines * Coinciding lines | Vocabulary:   * Substitution * Elimination * Infinite Solutions * No solution * One solution | Vocabulary: | Vocabulary: |